

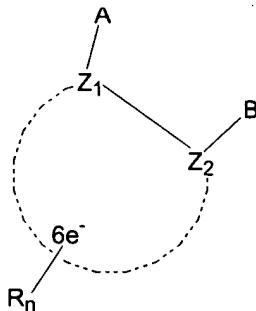
AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 – 102. (canceled)

103. (currently amended) A method of increasing the vigor and/or the yield of an agronomic plant that is not affected by Take-all disease and which is a bean which is selected from the genera *Vigna*, *Glycine*, *Vicia* and *Phaseolus* group consisting of garden pea, alfalfa, peanuts, soybeans, vetch, cowpeas, fava bean, trefoil, clovers and *Phaseolus* spp. beans, wherein the method comprises treating the plant or its propagation material with a composition which comprises an effective amount of a fungicide having the formula



wherein Z₁ and Z₂ are C and are part of a thiophene an aromatic ring selected from benzene, thiophene, furan, and benzothiophene;

A is selected from $-C(X)\text{-amine}$, $-C(O)\text{-}SR_3$, $\text{NH}-C(X)R_4$, and $-C(\text{=NR}_3)\text{-}XR_7$;

B is $-W_m\text{-}Q(R_2)_3$ or selected from o-tolyl, 1-naphthyl, 2-naphthyl, and 9-phenanthryl, each optionally substituted with halogen or R₄;

Q is C, or Si;

W is $-C(R_3)_p\text{H}_{(2-p)}$; or when Q is C, W is selected from $-C(R_3)_p\text{H}_{(2-p)}$, $\text{N}(R_3)_m\text{H}_{(1-m)}$, S(O)_p , and O ;

X is O or S;

n is 0, 1, or 2, or 3;

m is 0 or 1;

p is 0, 1, or 2;

each R is independently selected from

a) halo, formyl, cyano, amino, nitro, thiocyanato, isothiocyanato, trimethylsilyl, and hydroxy;

b) C₁-C₄ alkyl, alkenyl, alkynyl, C₃-C₆ cycloalkyl, and cycloalkenyl, each optionally substituted with halo, or hydroxy, thio, amino, nitro, cyano, formyl, phenyl, C₁-C₄ alkoxy, alkylcarbonyl, alkylthio, alkylamino, dialkylamino, alkoxy carbonyl, (alkylthio)carbonyl, alkylaminocarbonyl, dialkylaminocarbonyl, alkylsulfinyl, or alkylsulfonyl; and

c) phenyl, furyl, thienyl, pyrrolyl, each optionally substituted with halo, formyl, cyano, amino, nitro, C₁-C₄ alkyl, alkenyl, alkynyl, alkoxy, alkylthio, alkylamino, dialkylamino, haloalkyl, and haloalkenyl;

d) C₁-C₄ alkoxy, alkenoxy, alkynoxy, C₃-C₆ cycloalkyloxy, cycloalkenyoxy, alkylthio, or alkylsulfinyl, alkylsulfonyl, alkylamino, dialkylamino, alkylcarbonylamino, aminocarbonyl, alkylaminocarbonyl, dialkylaminocarbonyl, alkylcarbonyl, alkylcarbonyloxy, alkoxy carbonyl, (alkylthio)carbonyl, phenylcarbonylamino, phenylamino, each optionally substituted with halo;

wherein two R groups may be combined to form a fused ring;

each R₂ is independently selected from alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl and phenyl, each optionally substituted with R₄ or halogen; and wherein, when Q is C, R₂ may also be selected from halo, alkoxy, alkylthio, alkylamino, and dialkylamino; and

wherein two R₂ groups may be combined to form a cycle group with Q;

R₃ is C₁-C₄ alkyl;

R₄ is C₁-C₄ alkyl, haloalkyl, alkoxy, alkylthio, alkylamino, or dialkylamino;

R₇ is C₁-C₄ alkyl, haloalkyl, or phenyl, optionally substituted with halo, nitro, or R₄;

or an agronomic salt thereof, wherein the plant or its propagation material possesses a transgenic event providing the plant with resistance to a herbicide that is selected from the group consisting of resistance to glyphosate, glufosinate, imidazolinone herbicides, and sulfonylurea herbicides and the treatment comprises foliar application of glyphosate said herbicide.

104, 105. (canceled)

106. (previously presented) The method according to claim 103, wherein the fungicide is 4,5-dimethyl-N-2-propenyl-2-(trimethylsilyl)-3-thiophenecarboxamide.

107. (canceled)

108. (currently amended) The method according to claim 103, wherein the treatment comprises treating the seed of the plant with an inoculant selected from the group consisting of *Azospirillum spp.*, *Rhizobium spp.*, *Bradyrhizobium spp.*, a mixture of *Rhizobium spp.* and *Bradyrhizobium spp.*, and a mixture of either *Rhizobium spp.*, or *Bradyrhizobium spp.* with any other microorganisms, and further includes foliar treatment of the plant with the fungicide, and foliar application of glyphosate said herbicide.

109. (currently amended) The method according to claim 103, wherein the step of treating the plant or its propagation material comprises applying the fungicide to the foliage of the plant in combination with glyphosate said herbicide.

110, 111. (canceled)

112. (previously presented) The method according to claim 109, wherein the fungicide is 4,5-dimethyl-N-2-propenyl-2-(trimethylsilyl)-3-thiophenecarboxamide.

113. – 116. (canceled)

117. (previously presented) The method according to claim 103, where the treatment of the plant or its propagation material comprises treatment of a seed with an inoculant comprising *Azospirillum spp.*, or *Rhizobium spp.*, or *Bradyrhizobium spp.*, or a

mixture of *Rhizobium spp.* and *Bradyrhizobium spp.*, or a mixture of either *Rhizobium spp.*, or *Bradyrhizobium spp.* with any other microorganisms.

118 - 134. (canceled)

135. (currently amended) The method according to claim 103, wherein ~~Z₁ and Z₂ are C and are part of an aromatic ring which is thiophene;~~ A is -C(O)-amine selected from -C(X)-amine, wherein the amine is substituted with a first and a second amine substituent or with an alkylaminocarbonyl and a hydrogen, --C(O)--SR₃, --NH--C(X)R₄, and --C(=NR₃)-XR₇;

the first amine substituent is selected from the group consisting of C₁ - C₁₀ straight or branched alkyl, alkenyl, or alkynyl groups or mixtures thereof optionally substituted with one or more halogen, hydroxy, alkoxy, alkylthio, nitrile, alkylsulfonate, haloalkylsulfonate, phenyl, C₃ - C₆ cycloalkyl and C₅ - C₆ cycloalkylkenyl; phenyl optionally substituted with one or more C₁ - C₄ straight or branched alkyl, alkenyl, or alkynyl groups or mixtures thereof, cycloalkyl, cycloalkenyl, haloalkyl, alkoxy and nitro; C₃ - C₆ cycloalkyl, C₅ - C₆ cycloalkenyl, alkoxy, alkenoxy, alkynoxy, dialkylamino, and alkylthio;

and the second amine substituent is selected from the group consisting of hydrogen; C₁ - C₆ straight or branched alkyl, alkenyl, or alkynyl groups or mixtures thereof optionally substituted with one or more halogen, hydroxy, alkylcarbonyl, haloalkylcarbonyl, alkoxy carbonyl, and dialkylphosphonyl;

B is ~~W_m-Q(R₂)₃ or selected from o-tolyl, 1-naphthyl, 2-naphthyl, and 9-phenanthryl, each optionally substituted with halogen or R₄;~~

Q is C, or Si;

W is ~~C(R₃)_pH_(2-p)~~; or when Q is C, W is selected from ~~C(R₃)_pH_(2-p)~~, ~~N(R₃)_mH_(1-m)~~, ~~S(O)_p~~, and ~~O~~;

X is O or S;

n is 2;

m is 0 or 1;

p is 0, 1, or 2;

wherein two R groups are combined to form a nonheterocyclic ring fused with the thiophene ring, which is not a benzothiophene other than a tetrahydrobenzothiophene, said two R groups being selected from the group consisting of C₁–C₄ alkyl, alkenyl, C₃–C₆ cycloalkyl and cycloalkenyl, each optionally substituted with hydroxy, thio, phenyl, C₁–C₄ alkoxy, alkylthio, alkylsulfinyl, or alkylsulfonyl;

each R₂ is independently selected from alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl and phenyl, each optionally substituted with R₄ or halogen; and wherein when Q is C, R₂ may also be selected from halo, alkoxy, alkylthio, alkylamino, and dialkylamino; and further when Q is C, then two R₂ groups may be combined to form a cycloalkyl group with Q;

R₃ is C₁–C₄ alkyl;

R₄ is C₁–C₄ alkyl, haloalkyl, alkoxy, alkylthio, alkylamino, or dialkylamino; and

R₇ is C₁–C₄ alkyl, haloalkyl, or phenyl, optionally substituted with halo, nitro, or R₄; or an agronomic salt thereof.

136 - 137. (canceled)

138. (currently amended) The method according to claim 135 claim 137, wherein A is -C(O)-amine, wherein the amino radical is substituted with one or two groups selected from hydrogen; hydroxy; alkyl, alkenyl, and alkynyl, which may be straight or branched chain or cyclic; alkoxyalkyl; haloalkyl; hydroxyalkyl; alkylthio; alkylthioalkyl; alkylcarbonyl; alkoxy carbonyl; aminocarbonyl; alkylaminocarbonyl; cyanoalkyl; and mono- or dialkylamino; phenyl, phenylalkyl or phenylalkenyl, each optionally substituted with one or more C₁–C₄ alkyl, alkoxy, haloalkyl, C₃–C₆ cycloalkyl, halo, or nitro groups; and C₁–C₄ alkyl or alkenyl substituted with pyrimidinyl, thienyl, or furanyl; and wherein the amino radical may be a N-bonded heterocycle selected from morpholine, piperazine, piperidine, pyrrole, pyrrolidine, imidazole, and triazoles, each optionally substituted with C₁–C₆ alkyl groups.

139. (cancelled)

140. (previously presented) The method according to claim 137 claim 139, wherein Q is Si.

141. (cancelled)

142. (currently amended) The method according to claim 140 claim 141, wherein each R₂ is methyl.

143. (previously presented) The method according to claim 142, wherein A is alkylaminocarbonyl or dialkylaminocarbonyl.

144 – 152. (canceled)

153. (currently amended) The method according to claim 103, wherein the agronomic plant that is ~~a legume~~ is selected from the ~~genera Glycine~~ group consisting of ~~soybeans fava beans, *Phaseolus* spp. beans, garden pea, and cowpeas.~~

154. (canceled)

155. (previously presented) The method according to claim 103, wherein the agronomic plant is a soybean plant.

156. (previously presented) The method according to claim 103, wherein the treatment comprises treatment of a seed, wherein the seed is treated with an amount of the composition sufficient to include the fungicide in an amount that is within the range of about 0.1 gm/100 kg of seed to about 500 gm/100 kg of seed.

157. (previously presented) The method according to claim 156, wherein the seed is treated with an amount of the composition sufficient to include the fungicide in an amount that is within the range of about 10 gm/100 kg of seed to about 100 gm/100 kg of seed.

158. (previously presented) The method according to claim 156, wherein the seed is treated with an amount of the composition sufficient to include the fungicide in an amount that is within the range of about 20 gm/100 kg of seed to about 50 gm/100 kg of seed.